

IN THE CLAIMS:

Please amend the claims to read as shown below:

1. (Currently Amended) A method for determining a concentration of at least one, or more than one analyte in a sample contained in a blood bag or in a tubing in fluid communication with said blood bag, using an instrument comprising at least one, or more than one calibration algorithm for said at least one, or more than one analyte, said method comprising:

a) irradiating said sample in said tubing, or said blood bag, using a radiation source of about 475 nm to about 2,700 nm;

Q1 b) measuring an absorbance ~~from~~ of said sample ~~for said at least one~~ analyte; and

c) calculating a concentration of said at least one, or more than one analyte using said absorbance and said at least one, or more than one calibration algorithm.

2. (Currently Amended) The method of claim 1, wherein ~~in~~ said step of calculating (step c)) comprises combines determining values of first derivatives of at least two, or more than two portions of a spectrum generated from said absorbance step of measuring (step b), and incorporating said first derivatives into said one, or more than one calibration algorithm to provide said concentration.

3. (Original) The method of claim 1 wherein said blood bag, or said tubing is translucent and contains writing on its surface and irradiation is transmitted through said writing, said blood bag or said tubing, and said sample contained in said blood bag or said tubing.

4. (Original) The method of claim 1 wherein said step of irradiating (step a)) includes reflecting radiation from a reflective surface placed behind said blood bag or said tubing.

5. (Original) The method of claim 2 wherein in said step of measuring (step b)), light leakages are compensated for by measuring dark current for both sample and reference measurements.

6. (Currently Amended) The method of claim 2, wherein ~~the at least~~ said one, or more than one analyte is selected from the group consisting of haemoglobin, bilirubin, biliverdin, equivalent intralipid, methylene blue and cross-linked haemoglobin.

7. (Currently Amended) The method of claim ~~6~~ 1, wherein ~~in said step of measuring (step b))~~ said absorbance measurement for said at least one, or more than one analyte is ~~incorporated into an algorithm~~ selected from the group consisting of haemoglobin, bilirubin, biliverdin, equivalent intralipid, methylene blue, and cross-linked haemoglobin, ~~and a combination thereof, and said concentration of said one, or more than one~~ analyte in said sample is determined.

91
cont
8. (Currently Amended) A method for determining a concentration of one₁ or more than one of haemoglobin, bilirubin, biliverdin, equivalent intralipid, methylene blue and cross-linked haemoglobin in a sample contained in a blood bag or in a tubing in fluid communication with said blood bag, using an instrument comprising one₁ or more than one calibration ~~algorithms~~ algorithm for each of said haemoglobin, bilirubin, biliverdin, equivalent intralipid, methylene blue and cross-linked haemoglobin, said method comprising:

a) irradiating said sample in said tubing or said blood bag using a radiation source of about 475 nm to about 2,700 nm;

b) measuring an absorbance ~~from of~~ of said sample₁ ~~for said one₁ or more than one of haemoglobin, bilirubin, biliverdin, equivalent intralipid, methylene blue and cross-linked haemoglobin;~~ and

c) calculating a concentration for one₁ or more than one of said haemoglobin, bilirubin, biliverdin, equivalent intralipid, methylene blue and cross-linked

91
cont
haemoglobin using haemoglobin by said absorbance and said one or more calibration algorithms, by combining determining values of first derivatives of at least two, or more than two portions of a spectrum generated from said absorbance step of measuring (step b), and incorporating said first derivatives into said one, or more than one calibration algorithm to provide said concentration.
